Bay Community Health News



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Public Health Preparedness for Infectious Outbreaks

Avian Influenza

Avian influenza has been documented in domestic poultry and wild waterfowl at low levels in the United States for decades. Just as in people, birds commonly get the flu, too. In birds, most strains of the virus are mild and cause only mild symptoms. Despite there being over 140 strains of Avian Influenza in birds, people are rarely infected.

The virus currently of global concern is a strain of H5N1 Avian influenza originally documented in Asian countries. This strain is a Highly Pathogenic strain, which causes severe illness and death in poultry. To date, this highly pathogenic form of H5N1 Avian influenza (HPAI) has not been found in the U.S. However, a Low Pathogenic strain of H5N1 was found on a Michigan poultry farm in 2002. At that time, Michigan's State Veterinarian recommended the poultry flock be humanely destroyed as a safety precaution.

As of early April 2006, the H5N1 strain of global concern has not been detected in either birds or humans in the U.S. However, if the HPAI strain is detected in the U.S., it does not mean that a human pandemic has begun, or will begin. For a pandemic to occur, the virus must be easily transmitted from person to person. At this time the HPAI strain of concern does not have that ability.

The HPAI strain has been fatal to birds and has caused extreme illness in a number of people and animals in other countries. The infected people had close contact with sick or dead infected domestic poultry, including plucking feathers off infected dead birds, selling sick poultry in live bird markets, and sleeping in barns with sick birds where they were exposed to bird droppings. Mammals, including humans that were exposed to uncooked infected birds, also have become sick with HPAI.

According to the World Health Organization (WHO), as of early July 2006, approximately 134 human deaths caused by HPAI have been identified worldwide. Although the highly pathogenic H5N1 strain may make people extremely sick and can even be fatal, there is no strong evidence the disease can be spread from person to person. Unlike seasonal flu, which causes approximately 36,000 deaths each year in the U.S., HPAI in people is more likely to be an occupational illness of those who have close contact with sick and dead poultry. In this country it is very rare for people in cities and towns to be exposed to sick live poultry, and the USDA inspection system prevents diseased animals from entering the food chain.

The High Path H5N1 strain could reach the U.S. in a number of ways -- wild bird migration, smuggling of birds or poultry products, and travel by infected people. The disease is being monitored closely by local, state and federal agencies and the domestic poultry industry. These agencies are taking steps to prepare for and minimize the potential health, economic and conservation impacts of HPAI, if it should be detected in the U.S. and Michigan.

Concerns about public health relate to the potential for the virus to mutate, or change into a form that could spread easily from person to person. The U.S. Department of Health and Human Services (DHHS) is aggressively working with a team of federal, state and industry partners to ensure that public health is protected.

An Avian influenza outbreak does not imply that there will be a human outbreak, or a pandemic. However, as part of your family emergency response plan, each individual and family should know both the magnitude of what can happen during a large-scale disease outbreak, and what actions can be taken to help lessen the impact on themselves and their community.

Public Health Preparedness for Infectious Outbreaks Continued

Avian Influenza Continued

To plan for a disease outbreak you should do several things such as:

- ✓ Store a supply of water and food, it will be important for you to have extra supplies on hand. This can be useful in other types of emergencies, such as power outages, winter storms and disasters.
- ✓ Have nonprescription drugs and other health supplies on hand, including pain relievers, stomach remedies, cough and cold medicines, fluids with electrolytes and vitamins.
- ✓ Talk with family members and loved ones about how they would be cared for if they became sick, and what will be needed to care for them in your home.
- ✓ Volunteer with local groups to prepare and assist with emergency response.
- ✓ Get involved in your community as it works to prepare for disease outbreaks.

REPORTED NUMBER OF COMMUNICABLE DISEASE CASES IN BAY COUNTY & THE STATE OF MICHIGAN FOR 2005 & 2006

(2006 represents January – July)

	BAY COUNTY		MICHIGAN	
DISEASE	2005	2006	2005	2006
Viral Meningitis	10	3	1090	368
Bacterial Meningitis	2	1	121	62
Campylobacter	7	0	801	412
Cryptococcosi	1	0	52	24
Giardiasis	9	1	785	319
Hepatitis C Chronic	24	28	5991	3853
Hepatitis C Acute	8	3	100	78
Hepatitis B Acute	2	0	165	79
Hepatitis B Chronic	6	2	1411	909
Hepatitis A	0	0	104	63
Legionellosis	1	1	119	51
Salmonellosis	5	2	928	485
Shigellosis	0	0	224	96
Pertussis	4	8	237	126
Tuberculosis	0	0	0	0
Escherichia coli 0157:H7	2	0	80	31
Chicken Pox (Varicella)	8	13	910	1528
Mumps	0	1	19	16
HIV, Adult	3	3	655	1
Chlamydia	163	136	39368	17780
Gonorrhea	44	15	18045	7058
Syphilis	1	1	488	63

Mumps

Mumps is an infection caused by the mumps virus. Anyone who is not immune from either previous mumps infection or from vaccination can get mumps. Before the routine vaccination program was introduced in the United States, mumps was a common illness in infants, children and young adults. Most people have now been vaccinated; therefore mumps is now a rare disease in the United States. Of those people who do get mumps, up to half have very mild, or no symptoms at all, and therefore do not know they were infected with mumps.

The most common symptoms are fever, headache, muscle aches, tiredness and loss of appetite followed by swollen salivary glands under the jaw. However, it can lead to more severe problems, such as hearing loss and meningitis.

Although mumps has been very rare in the U.S, there has recently been an outbreak that swept through nine Midwestern states - Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska and Wisconsin. Twenty-three cases of mumps were reported in Michigan in 2005. This has caused many health departments to promote the importance of limiting transmission of the infection.

Mumps is spread by mucus or droplets from the nose or throat of an infected person, usually when a person coughs or sneezes. Surfaces of items can also spread the virus if someone who is sick touches them without washing their hands, and someone else then touches the same surface and then rubs their eyes, mouth, nose etc.

Receiving the mumps vaccine is the best way to prevent an outbreak. Other things people can do to prevent mumps and other infections is to wash hands well and often with soap, and to teach children to wash their hands also. Eating utensils should not be shared, and surfaces that are frequently touched should also be regularly cleaned with soap and water, or with cleaning wipes.

*Statistics in the communicable disease table were obtained from the Michigan Disease Surveillance System (MDSS), a secure web-based database that public health, health care, and medical laboratory professionals access to report communicable diseases.

Public Health Preparedness for Infectious Outbreaks Continued

CERT

CERT (Certified Emergency Response Team) is a training program that prepares you to help yourself, your family, and your neighbors in the event of a disaster. During an incident, emergency service personnel may not be able to reach everyone right away. By getting trained in CERT, you will have the skills to help emergency responders save lives and protect property.

As a member of a CERT team, you can respond to disasters, participate in drills and exercises, and take additional training. CERT teams are known and trusted resources to emergency responders and their communities. Under the direction of local emergency responders, CERT teams help provide critical support by giving immediate assistance to victims, providing damage assessment information, and organizing other volunteers at a disaster site. Volunteers trained in CERT also offer a potential workforce for performing duties such as shelter support, crowd control, and evacuation. The role of a CERT volunteer is to help others until trained emergency personnel arrive.

In addition to supporting emergency responders during a disaster, the CERT program builds strong working relationships between emergency responders and the people they serve. CERT teams also help the community year-round by helping with community emergency plans, neighborhood exercises, preparedness outreach, fire safety education, and workplace safety.

CERT training takes about 20 hours to complete and provides critical skills in emergency preparedness and response.

Volunteer Today!!!

Medical Reserve Corps

Medical Reserve Corps is a specialized component of Citizen Corps, this is a national network of volunteers dedicated to ensuring hometown security. MRC units are community-based and function as a way to locally organize and utilize volunteers, medical professionals and others who want to donate their time and expertise to promote healthy living throughout the year and to prepare for and respond to emergencies.

Pertussis

Pertussis, commonly referred to as whooping cough, is a highly contagious disease of the respiratory tract. It is caused by a bacterium that is found in the mouth, nose and throat of an infected person. Between 1995 and 2000 an average of 84 cases were reported each year in Michigan. In 2003, 140 cases were reported in the state; however, many more may have been undiagnosed or unreported.

Pertussis can occur at any age. However, severe illness is more common in young children who have not been immunized. Older children or adults with pertussis usually have milder symptoms. Pertussis can be hard to diagnose in very young infants, teens, and adults because their symptoms often look like a cold with a nagging cough.

Pertussis is mostly spread when infected people cough or sneeze, expelling droplets that contain the pertussis germs. Touching contaminated objects such as tissues or cups can also spread the disease. Infants often get the disease from older siblings or adults.

Pertussis begins as a mild upper respiratory infection. At first, symptoms resemble those of a common cold, with sneezing, runny nose, low-grade fever and a mild cough. After a couple of weeks the cough becomes more severe and uncontrolled. Coughing spells may be intense and followed by a crowing or high-pitched whoop. Thick, clear mucus may be discharged. The person may vomit during the coughing spell, or become blue in the face from lack of air. Between coughing spells the person often appears well. These episodes may recur for one to two months, and are more frequent at night.

The vaccine for pertussis is given as part of a combination vaccine that also protects against diphtheria and tetanus and possibly other diseases. Doctors recommend that the vaccine be given at two, four, six months, and 15-18 months of age, with an additional dose at 4-6 years of age. The single most effective way to prevent pertussis and its spread is by achieving the highest possible level of immunization in the community.

Chickenpox

Although Chickenpox can now be prevented by vaccination, it still remains active in our community. Chickenpox is an infectious disease caused by the varicella-zoster virus, which results in a blister-like rash, itching, tiredness and fever. The rash appears first on the trunk and face, but can spread over the entire body causing between 250 to 500 itchy blisters. Most cases of chickenpox occur in persons less than 15 years old. Chickenpox is highly infectious and spreads from person to person by direct contact or through the air from an infected person's coughing or sneezing. A person with chickenpox is contagious 1-2 days before the rash appears and until all blisters have formed scabs. It takes from 10-21 days after contact with an infected person for someone to develop chickenpox.

MRC volunteers can support local public health by promoting disease prevention, improving health literacy, eliminating health disparities and enhancing public health preparedness. They can also assist local hospitals and health departments with personnel needs, and participate in mass vaccination exercises and community disaster drills. Volunteers can consist of practicing, retired or otherwise employed medical professionals. Community members without medical training can also help assist with administrative and other essential support functions. For more information visit; http://www.citizencorps.gov/programs/cert.shtm.



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Creating A Healthy Environment For The Community

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MISSION

We, at the Bay County Health Department, commit to providing Bay County residents with quality health care delivered by our qualified, compassionate staff. We believe in a holistic approach in promoting the optimal level of wellness in each individual.

GOALS

The goal of public health administration is to establish and maintain a community focus on public health through the development of an efficiently organized, adequately staffed and effective Health Department.

The Health Department was created to meet the needs and the expectations of all citizens in Bay County. Many of the services are free of charge while others are based on income, eligibility criteria, and fee for service.

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For more information on Emergency Preparedness, visit: http://www.baycountymi.gov/bay/home.nsf/Public/Bay_County_Health_Department.htm

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